

# A Case of Russell Body Esophagitis in the absence of *Helicobacter pylori* and Barrett's Esophagitis

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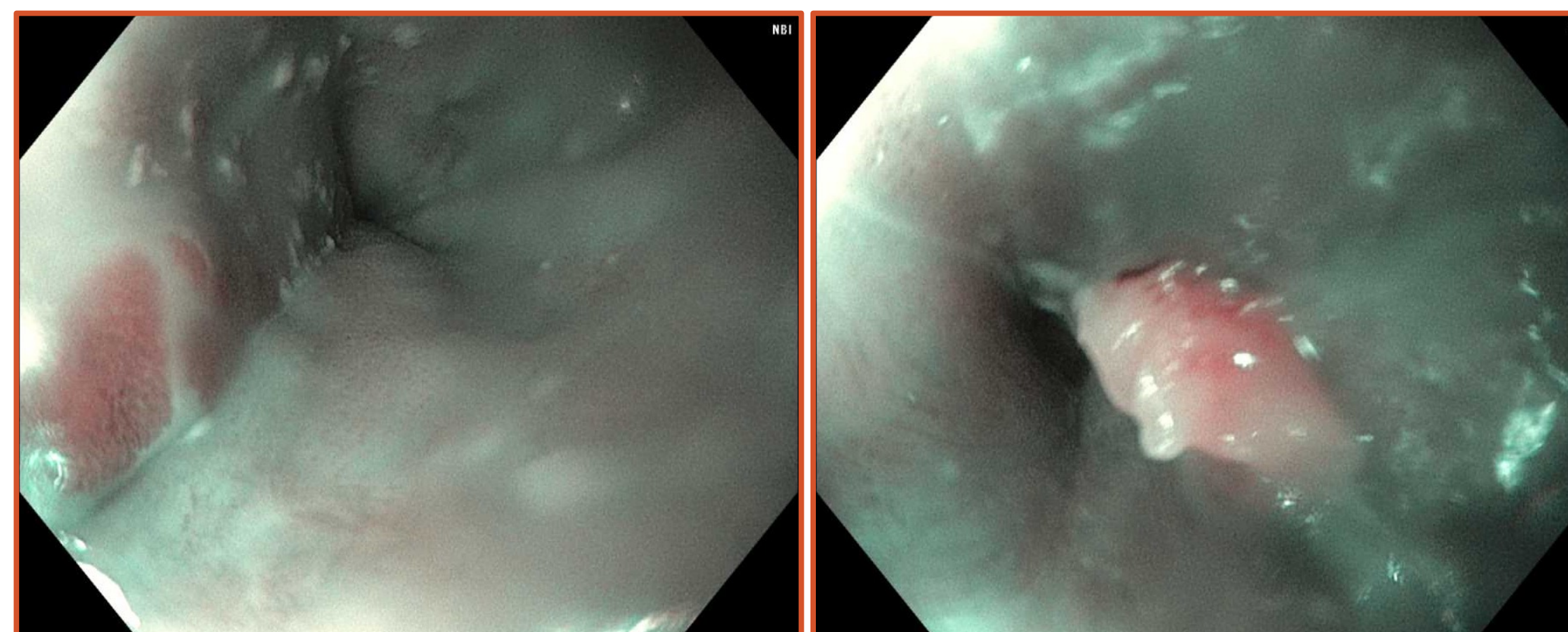
## Background

- Russell Body Esophagitis (RBE) was first described in the literature in 2005. The diagnosis is made via the identification of Russell Bodies (RBs) within plasma cells on biopsies of esophageal mucosa.
- Russell Bodies are inclusions of immunoglobulins found within the cytoplasm of plasma cells. Although there are few published cases of RBE, it is believed to share its pathogenesis with other gastrointestinal manifestations of Russell Body inclusions.
- RBE has been primarily associated with Barrett's Esophagus. Russell Body Gastritis (RBG) and Russell Body Duodenitis (RBD) have significantly more published cases and an apparent association with *Helicobacter pylori*.

## Case

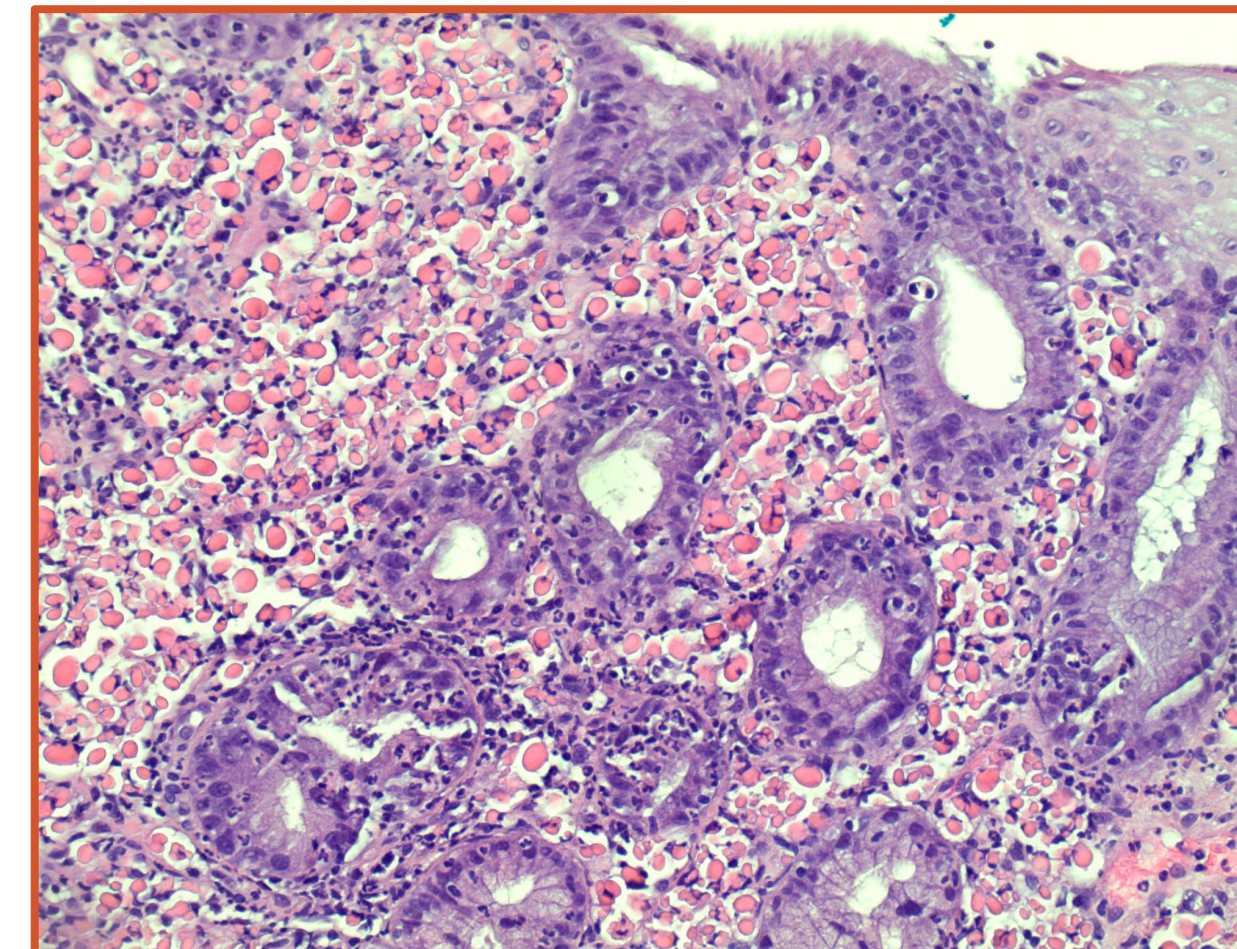
- A Caucasian man over 80 years old with atrial fibrillation (on apixaban), chronic obstructive pulmonary disease, hypertension, hypothyroidism, lymphoplasmacytic lymphoma, and history of upper gastrointestinal bleed was brought in by ambulance with a chief complaint of weakness.
- The patient was found to be anemic (Hemoglobin 7.8 mg/dL). Gastroenterology was consulted and EGD was performed. Islands of salmon-colored mucosa (Figure A) were present at 35 cm. At the gastroesophageal junction (approximately 40 cm), a single, 8 mm nodule was present (Figure B). No source of upper gastrointestinal bleeding was identified. Biopsies of both lesions were taken, as well as gastric biopsies for *H. pylori*.

## Esophagogastroduodenoscopy



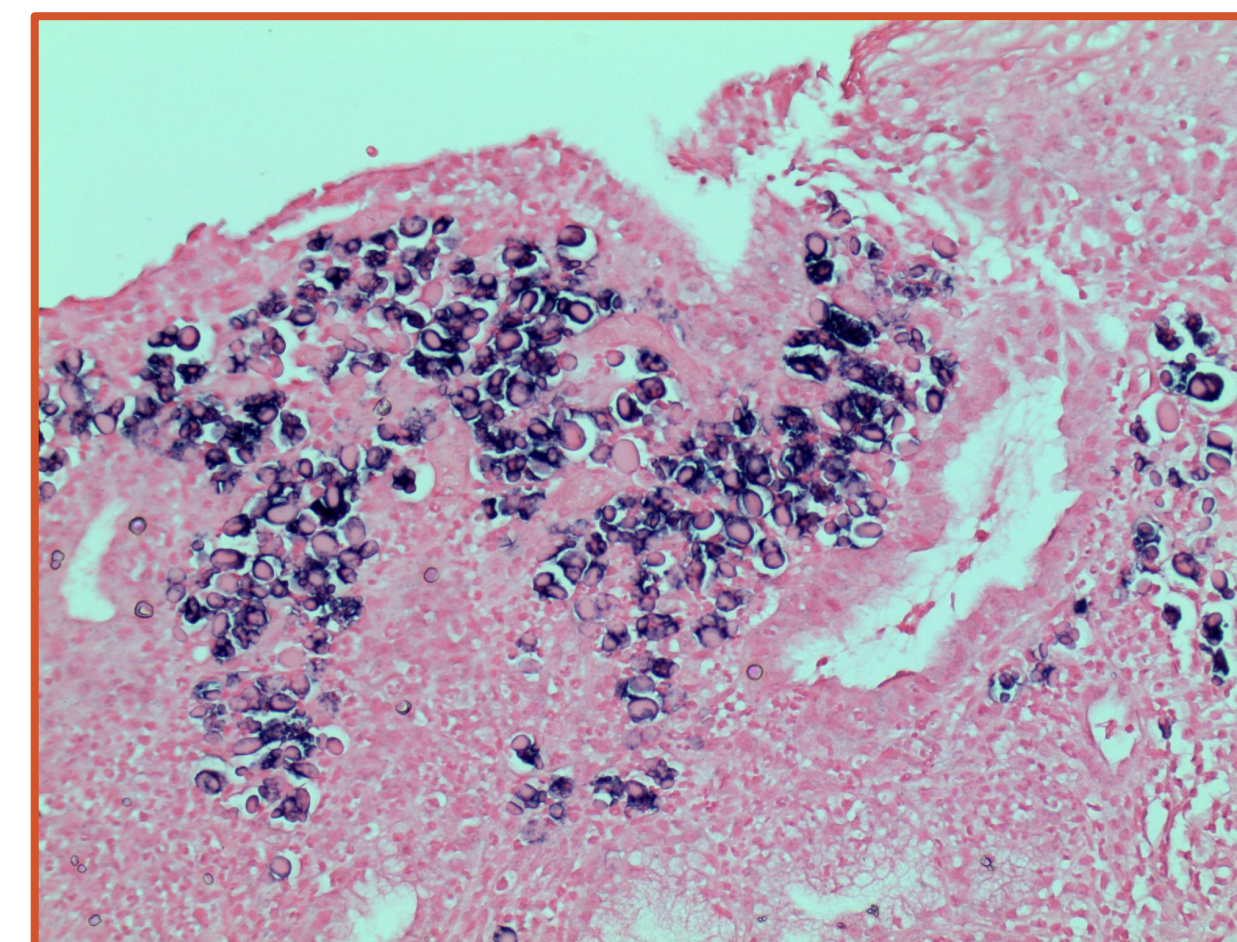
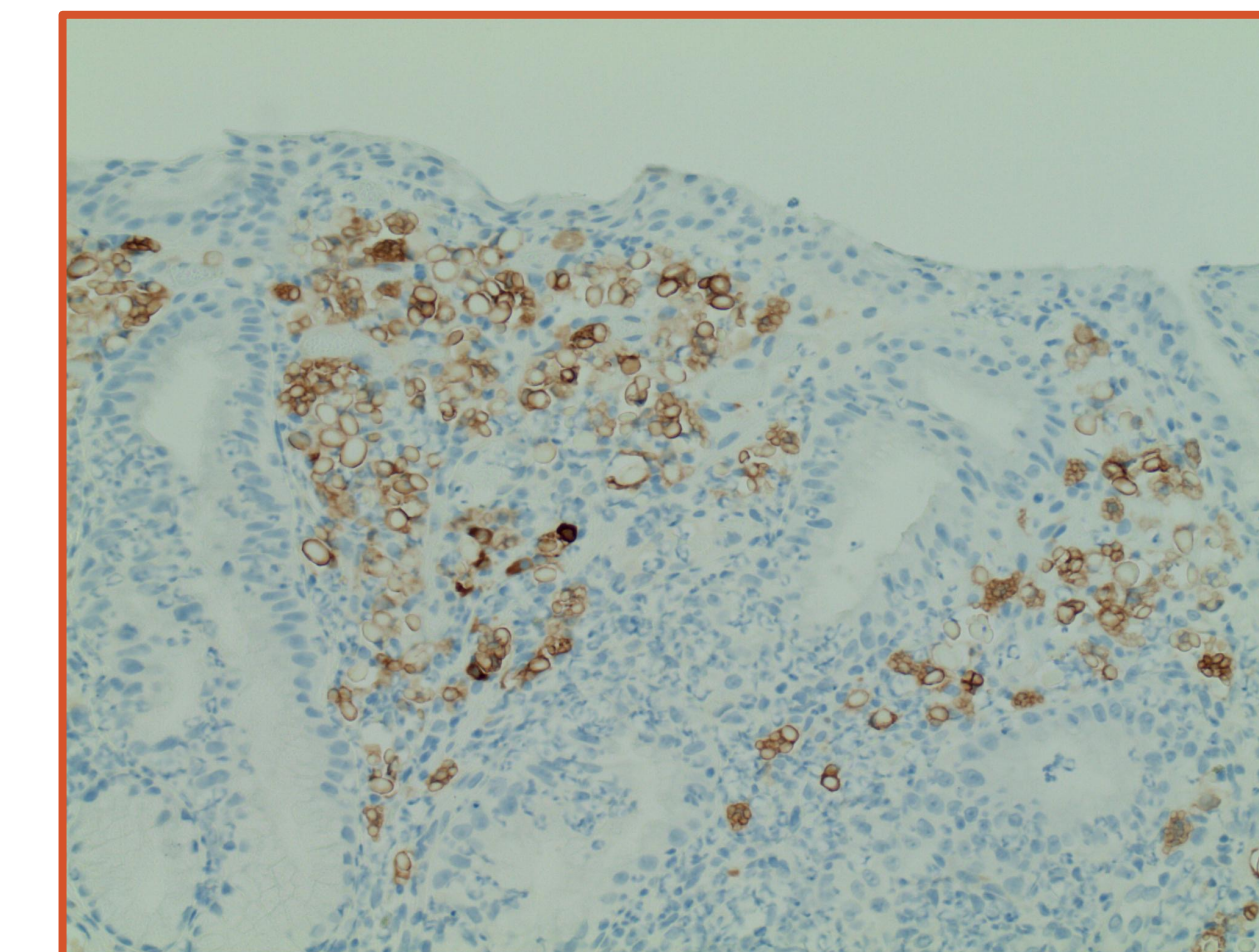
**Figure A:** Salmon-colored esophageal mucosa at 35cm **Figure B:** 8 mm nodule visualized at the gastroesophageal junction

## Pathology



**Figure C:**  
H&E stain demonstrating Russell Bodies within B cells in the lamina propria.

**Figure D:**  
CD79a stain that confirms B lymphocytes.



**Figure E:**  
In situ hybridization for immunoglobulin heavy chain and kappa light chain.

- Biopsies were negative for Barrett's Esophagus. The esophageal nodule was diagnosed as Herpes Esophagitis. Gastric biopsies revealed no evidence of *H. pylori*.
- Overall, the findings were compatible with the involvement of the patient's known lymphoplasmacytic lymphoma manifesting as Russell Body Esophagitis.

## Discussion

- Given the association of gastrointestinal Russell Bodies with chronic inflammatory processes, the absence of the expected chronic gastrointestinal inflammatory processes should raise questions for further work-up.
- On endoscopy, this patient's lesions appeared to be Barrett's Esophagus; however, the pathology did not show any Barrett's metaplasia, which makes this case of RBE unique and underscores the importance of endoscopic biopsy.
- Russell Body Gastritis has been associated malignancy, especially in the absence of *Helicobacter pylori*, but there are no reported cases of Russell Body Esophagitis and malignancy.
- This case of Russell Body Esophagitis comes in a patient with Lymphoplasmacytic Lymphoma and Herpes Esophagitis. Unlike Lymphoplasmacytic Lymphoma, Herpes infection has never been associated with Russell Bodies. The herpetic nodule may be an incidental finding, but it is noteworthy given the dearth of available cases.

## Conclusion

- This case describes a new presentation of Russell Body Esophagitis – in the absence of Barrett's Esophagus.
- This case adds to the growing body of evidence that Russell Bodies in the upper gastrointestinal tract (in the absence of *H. pylori* and Barrett's Esophagus) herald malignancy.

## References

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